



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,772	04/23/2001	Endong Xun	MS1-553US	4242
22801	7590	01/07/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			BOA, DIHYE A	
			ART UNIT	PAPER NUMBER
			2654	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,772	XUN, ENDONG	
	Examiner	Art Unit	
	Dihye Boa	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 58-61 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/15/02</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1- 3, 5-8, 11 and 58-61 are rejected under 35 U.S.C. 102(e) as being anticipated by Duan *et al.* (U.S. Patent 6,778,949).

As per claim 1 and 58, Duan *et al.* teach:

- a parser for parsing selected text into individual translation units (relies on a conventional parsing method to build the nodes in a syntax parse tree that builds a parse tree from the leaf nodes to the root node, col. 9, lines 39-44),

Art Unit: 2654

- a word translation selector for choosing for the translation units an expression in a source language into an output expression in a target language for the translation units, (col. 2, lines 16-17) and
- a translation generator for translating the candidate word into corresponding words or phrases in the native language that can be presented to the inherent user interface (Fig 7 and Fig 2a which represents a generation tree method for use in the natural language translation).

3. As per claims 2 and 59, Duan *et al.* teach a morphological analysis module 206 which takes text input 202 and uses a source language dictionary 204 to decompose the words into morphemes by identifying root forms, grammatical categories, thesaurus information, and other lexical features of the words (col. 5, lines 51-55).

4. As per claim 3, Duan *et al.* teach a part-of-speech/base noun phrase identification module for tagging individual words with identifiers (syntax parse tree, Fig 2a).

5. As per claims 5 and 60, Duan *et al.* teach a phrase extension module (an expansion function, col. 11 lines 35-50) for applying phrase extension rules to individual words.

Art Unit: 2654

6. As per claims 6-8, Duan *et al.* teach a system of a dictionary module for translating the candidate word translations into the corresponding words or phrases, a word dictionary and phrase (multiword) dictionary (col. 6, lines 32-33).

7. As per claim 10, Duan *et al.* teach a template module (Fig 2a, element 208) that can be used to translate the candidate word translations into the corresponding words or phrase (col. 8, lines 26-33).

8. As per claim 11, Duan *et al.* teach rules module (col. 5, lines 43-50) that contains multiples rules for translating non-native language words into native language words.

9. As per claim 61, Duan *et al.* teach computer readable media with instructions that cause the processor to perform the actions claims 1 and 58 and produce the result (col. 8, lines 59-65).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2654

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duan *et al.*

Duan *et al.* does not explicitly teach a user interface to allow a user to select an English text to view a translation text in Chinese. However, the examiner takes Official Notice that it is old and well-known in the art to select English language text in view of a second language such as Chinese for a translation of the selected text.

Therefore, it would have been obvious for one of ordinary skill at the time the invention was made to include Chinese as a target language in the Duan system to make the translation system more versatile.

12. Claims 4, 9, 12-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duan *et al.* (U.S. Patent 6,778,949) in view of McCarley *et al.* (U.S. Patent 6,092,034).

13. As per claims 4 and 12, the Duan *et al.* reference teaches a reading system comprises of all the limitations of claim 3 upon which claim 4 depends. Duan *et al.* do not explicitly teach a statistical model.

McCarley *et al.* teach a statistical model (col. 7, lines 59-67, and col. 8, lines 1-15). Duan *et al.* and McCarley *et al.* are analogous art because they are from the same field of endeavor namely machine translation.

Therefore, it would have been obvious for one of ordinary skill at the time of invention to combine Duan *et al.* and McCarley *et al.* by adding the statistical

Art Unit: 2654

model to the reading system, to disambiguate a source language text and translate it into most likely target language sentences.

14. As per claims 13 and 15, the Duan *et al.* reference teaches a reading system comprising of all the limitations of claims 1 and 14 upon which these claims depend. Duan *et al.* do not explicitly teach a browser. McCarley *et al.* teach a browser (col. 2, lines 31-35). Duan *et al.* and McCarley *et al.* are analogous art because they are from the same field of endeavor namely machine translation.

Therefore, it would have been obvious for one of ordinary skill at the time of invention to combine Duan *et al.* and McCarley *et al.* in the reading system to also enable translation of foreign language information on the web.

15. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duan *et al.* (U.S. Patent 6,778,494) as applied to claim 6, in view of Carbonell *et al.* (U.S. Patent 6,139,201).

Duan *et al.* do not teach an irregular morphology dictionary.

Carbonell *et al.* teach: an irregular morphology dictionary (a listing of irregular morphological forms, col. 17, lines 21-29 and col. 18, lines 10-12).

At the time of invention it would have been obvious to a person of ordinary skill in the art, to have added Carbonell teaching of irregular morphology dictionary to the Duan's method of analyzing and manipulating linguistic structures, so as to

Art Unit: 2654

have a more versatile system with rules not only for the regular verb morphology (the default rule), but also for the different types of irregular verb morphology

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Corbonell *et al.* (U.S. Patent 6,163,785) teaches including irregular morphological variants in a translation system.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner Dihye Boa, whose telephone number is (703) 305-3498. The examiner can normally be reached on Mon-Fri 8:30am-5:00pm.

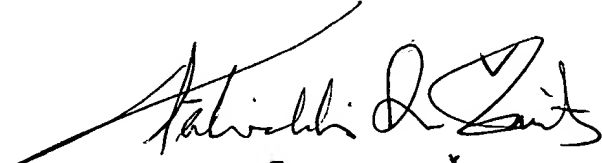
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Ivars Smits, can be reached on (703) 306-3011. The facsimile phone number for the Technology Center 2600 is (703) 872-9306.

Art Unit: 2654

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dihye Boa

12/28/2004



TĀLIVALDIS IVARS ŠMITS
PRIMARY EXAMINER